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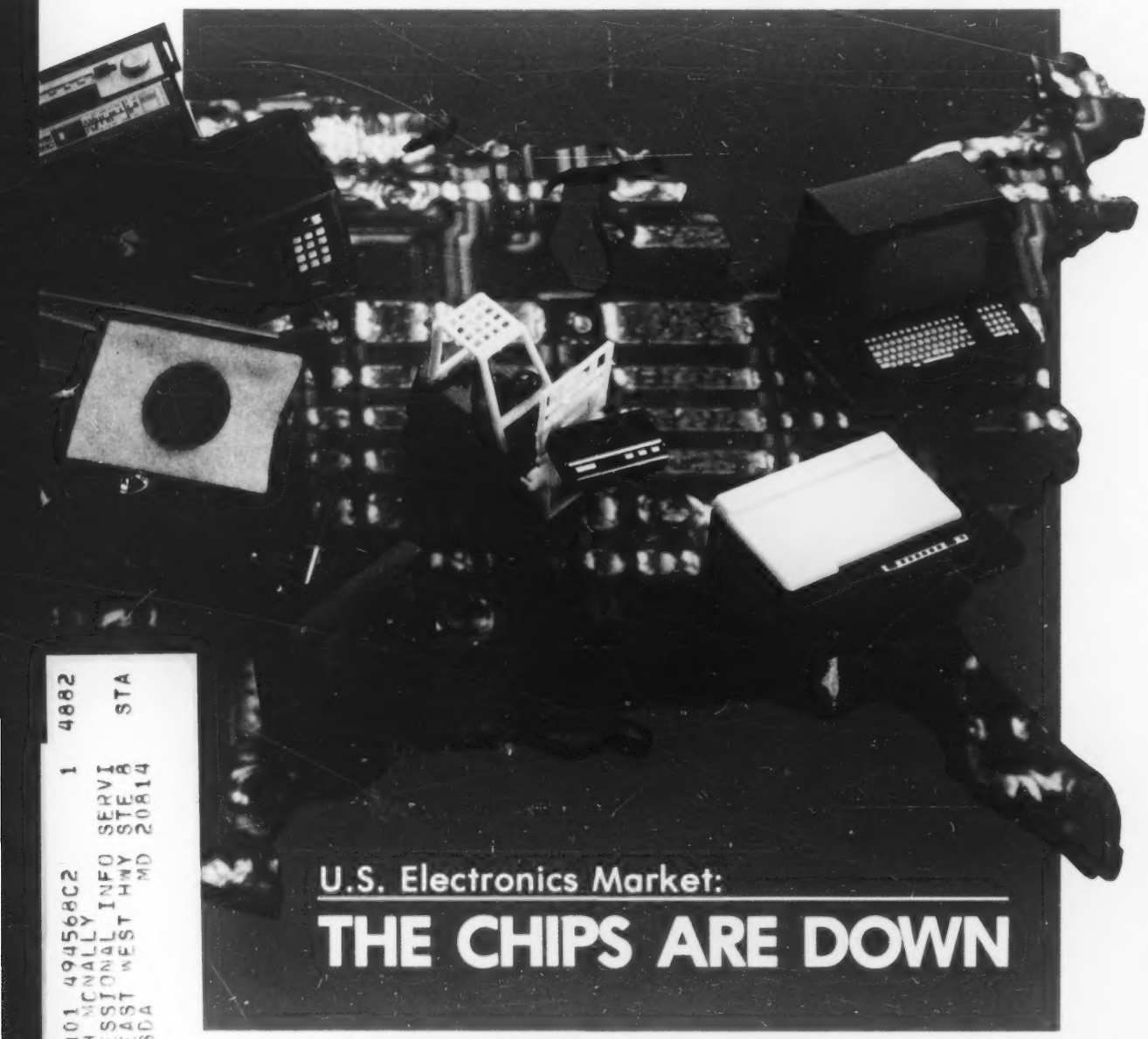

U.S. Electronics Market:

THE CHIPS ARE DOWN

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Murray on law: a sample case of suits

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August 1987 Vol. 31 No. 8

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PW PREDICTS

Rising prices bring increased capacity

There's little justification for talk about a significant increase in inflation. Major price yardsticks such as the industrial producer price and the cost-of-living indexes are edging up. But the advances are moderate—less than during early spring.

The only big increases have been in raw materials. *PurchasingWorld*'s industrial spot market barometer is running 11.5% ahead of late 1986 and 23% ahead of last summer. But this yardstick of crude materials is heavily weighted with metals and energy—both of which had been extremely depressed in 1986.

The worst of the runup may be over since production of many of these basic raw materials is about to be beefed up. Several large outfits, both here and abroad, have announced step-ups in metals output. And the same trend is possible in the energy sector.

The world is full of unused productive capacity—in metals, oil, chemicals, plastics, and other basic commodities. As prices rise, more potential will be unleashed, resulting in more supplies and a leveling off in prices.

Historical perspective also weakens the argument that recent rises in raw materials herald a more general inflationary surge. Over the past few decades, there has been a relatively poor correlation between basic raw materials and overall price inflation. During the 15-month period ending in the spring of 1984, sensitive raw materials—both on the spot and futures markets—rose significantly. Yet the producer price index advanced less than 1% in 1983 and only 1.7% in 1984 and 1985.

Also arguing against any big new inflationary runup is the fact that unit labor cost increases remain muted. This price force behind the underlying rate of inflation should rise only 2-2.5% this year—no different from last year's performance. And producer prices excluding food and energy have been rising at only a 2% annual rate in 1987 vs. 2.6% in 1986.

This latter trend suggests that domestic products are not following imports up the price ladder—probably because U.S. markets are still not that robust and many American firms are focusing on increasing market share rather than raising prices.

A new survey of corporate executives also points to a cautionary producer approach to price boosts. Only 37% expect their 3Q prices to be above a year ago.

Nor is it certain that suppliers can hold onto all of the boosts that have been posted. There's plenty of excess capacity in fabricated and raw materials.

Most economists remain optimistic about holding advances to modest proportions. One survey of 35 top forecasters suggests only a 4.5-5% inflation rate (cost-of-living basis) over the next six months.

Engineering plastic

The day when you'll be hosing down your all-plastic car may still be far off but more auto parts are going polymer. So are a lot of other end-use markets where engineering plastics are replacing metals, glass, wood, and other natural materials. That's the gist of a new Frost & Sullivan study which sees these materials growing 7.6% annually through 1990 to 1.6 billion lb vs. 1.1 billion lb in 1985.

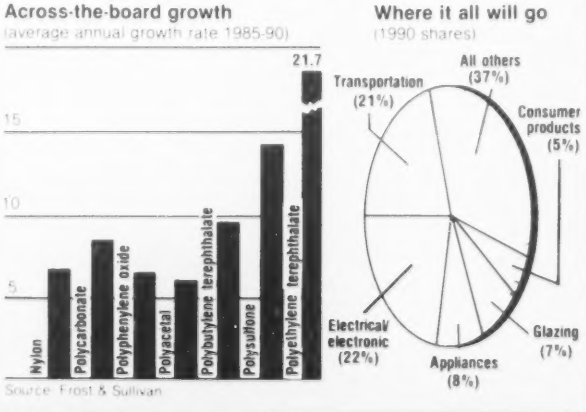
The big boost in the auto sector will come from large, panel-type parts, adding to the volume already established in bumpers, grilles, trim, lights, and other parts.

The electrical/electronic sector will also increase its use of these plastics, overtaking transportation on a poundage basis by 1990 (see chart).

By resin types, nylons lead the pack and will remain the No. 1 engineering resin over the next few years, accounting for more than a third of the market's total poundage and dollars. Polycarbonates will remain the second-highest volume engineering plastic. The biggest percentage gains will come from relatively small-volume polysulfones and polyethylene terephthalates.

These resins are expected to be under strong downward price pressures, both from end users and competitive polymers. In commodity resins, suppliers are busy upgrading resin properties and penetrating market segments where high-performance needs are more marginal. But engineering resin producers are fighting back by lowering both resin and processing costs.

A look ahead at engineering plastics



Source: Frost & Sullivan

Lead

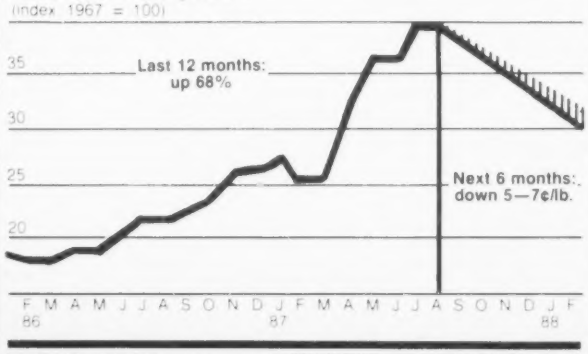
CURRENT SITUATION: Blame recent high prices on supply disruptions (the Canadians, Peruvians, and Mexicans are behind in deliveries to the U.S.) and low producer inventories rather than a big spurt in underlying demand. Refiners' inventory stocks are only in the 30,000 ton range—less than one month's supply at current shipment rates. **The recent near-40¢/lb price (up more than 15¢/lb from levels prevailing 1-1.5 years ago) seems unsustainable** when production increases.

DEMAND: All signs point to another lackluster year. The battery market, accounting for 60% of annual lead usage, is stagnating as new auto sales drop off by a million units. **Domestic consumption will only equal last year's 1.2-million-ton level vs. 1.3 million tons in 1984.** Nor is the longer-run outlook bullish. The use of smaller batteries, the leaded gasoline phaseout, and reduced lead cable sheathing (because of fiber optics competition) will hold demand gains to 1% a year through 1999.

SUPPLY: Current tightness should disappear soon as work stoppages end and new facilities are added. Additional capacity is expected in Australia, India, Latin America, and Canada. The new Faro mine in Canada alone will add 65,000 tons. Increasing production in the U.S. from two Missouri mines will raise primary totals here 25,000 tons this year (to over 400,000 tons). And more worldwide capacity will be ready by 1988 when **current production deficits give way to surpluses.**

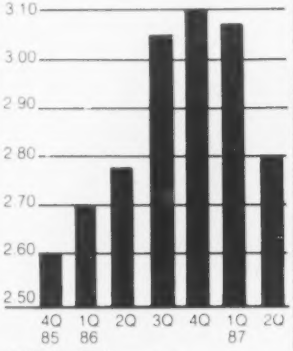
PRICE OUTLOOK: It's no longer a question of whether quotes will fall but when and by how much. The feeling is that prices will gradually decline as new supplies reach the market during the next six months. Tags will drop to 30-32¢/lb by this winter. And that's probably where they'll stabilize in 1988. **That's a high level—50% above the lows of early 1986 when lead was 18¢/lb.**

Producer lead prices



Molybdenum oxide

(Dealer price $/lb.)



Molybdenum

Prices should begin to bottom out following recently announced cutbacks by primary producers. Don't expect any rebound to earlier highs—for demand remains disappointing and byproduct production continues at recent high levels. Also worth noting: The largest Chilean producer (Codelco) has been mining richer grades of moly ore and has now supplanted Amax as the world's largest producer. In any case, prices are now at bargain-basement levels—with the dealer oxide quoted in the $2.60-2.70/lb range—well under the $3.15/lb high of last fall and nowhere near the $4.25 quote of early 1985.

Aluminum

Modest price increases are still the order of the day—with boosts recently posted on a variety of sheet, plate, and extruded products. Market ingot tags have been following suit. At latest report the basic material was fetching well over 70¢/lb—up close to 20¢/lb from beginning-of-year levels. Also indicative of strength: An industry shift to price-at-time-of-shipment rather than price-at-time-of-order. Demand isn't all that bad, either—with shipments, aided by a falloff in imports, rising to near 7.85 million tons this year—up 2.5% from 1986 levels.

Petroleum

OPEC's avowed aim to bring crude oil into the $20/bbl range by early next year could run into trouble: There's the likelihood of overproduction by Iraq when a new trans-Turkey pipeline opens later this year. Excess output by the United Arab Emirates is also likely. If both these nations exceed their quotas, OPEC production could hit 18 million bbl/day—well above the official 16.6 million limit and enough to bring another global oil buildup and a new round of price easiness.

Transportation

Figure on some truck rate boosts—as three of 10 major rate bureaus move to boost tags. Both the Eastern Central Motor Carriers Association and the Middlewest Motor Freight Bureau are increasing rates 2.5% overall—with the Pacific Inland Tariff Bureau posting a 1.5% hike. ECMA will boost rates between 2-7% with the higher rates applying to shorter-haul traffic. The MMFB will hike rates 5% on freight handled up to 300 miles, with smaller

increases applying on shipments moving greater distances. On the other hand, some major carriers (Roadway Express, Consolidated Freightways, Yellow Freight System, Carolina Freight Carriers, ABF Freight System, and Overnite Transportation Co.) have elected not to take the increase.

Import dependence

Source
Boston University School of Management

Import dependence

Don't downgrade offshore procurement—despite today's weaker dollar. If a new survey of 207 companies by Boston University is accurate, there are still plenty of opportunities abroad. A surprising 47% of queried firms expect to beef up their import percentages. Contrast this to the 17% who expect to cut back on incoming shipments and the remaining 36% who are not anticipating any appreciable change. One reason for this continuing interest in imports, aside from still-significant price advantages, is that many firms want to be wired into global technology.

Copper

The red metal finally seems to be climbing out of its deep hole. Producer prices have moved up strongly over recent months—and at last report were running some 15¢/lb above late 1986 levels. Credit the pickup to a drop in world stocks and global supply tightness. In any case, current holdings are now put at only 4.3 months of consumption as compared to the normal 7-8 month level. Prices over the next few months are likely to remain at current high levels—though there may be some modest correction after the recent runup.

Low-density polyethylene

Figure on paying about 2-3¢/lb more for most grades—with the bellwether liner grade moving up into the 33-34¢/lb range. Prodding the increase along are good demand (expected to run 7% ahead of 1986) and an industry operating rate above 90%. This supply tightness has brought some delivery-time stretchouts, and is expected to persist into 1988. At that time another 5% demand increase will be partially offset by a relatively small 3-4% increase in new production potential. Upshot: continued close-to-full-capacity operating rates.

Steel

The current mini-boom could run out of steam before long. Shipments, for example, could drop to only 32-33 million tons

Chemicals

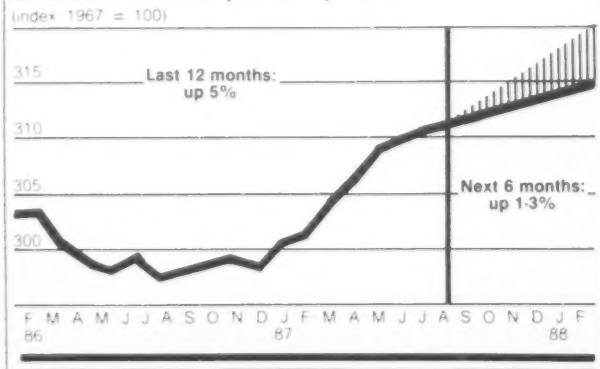
CURRENT SITUATION: Demand is up substantially. Year-to-date production is 4-5% ahead of a year ago. **Prices are up significantly, too**, because of better supply-demand balance as operating rates increase to 82%, and because of rising petrochemical feedstock costs resulting from the price increase in crude oil. Industry price averages are 5% ahead of a year ago. The increases are even greater for chloralkalis, benzene, styrene, and some plastic resins.

DEMAND: Current trends will continue this year. Most econometric models call for a 4% gain—almost twice the expected general growth rate and not much under last year's 4.6% advance. Vendors see sales volume in real terms increasing 5%. **Best showing this year will be in plastic resins where a 7% increase is expected. Organic chemicals should advance by 4%.** But paints will only equal 1986 levels.

SUPPLY: No problems are expected—but some organics may remain snug. New capacity is coming on stream relatively fast—**2% was added onto production potential over the past year. Gains should be bigger in 1988 and 1989**—judging from new plant and equipment plans. Surveys suggest a 6.5% increase in real spending in 1987 and an even bigger 1988 advance. This trend is most apparent in plastic resins where 3.2% capacity increases are estimated for 1988.

PRICE OUTLOOK: Further advances are inevitable. Aiding the trend will be continuing good demand, steady-to-higher feedstock costs, and higher import tabs engendered by a weak U.S. dollar. But there will be some exceptions such as benzene and styrene. These latter moves should moderate the overall upward impact, **holding average chemical price boosts to 1-3% (2-4% at annual rate) for the next six months.** The same goes for 1988—industrial chemical tabs are expected to be up another 3-4% on average.

Chemical & allied product prices



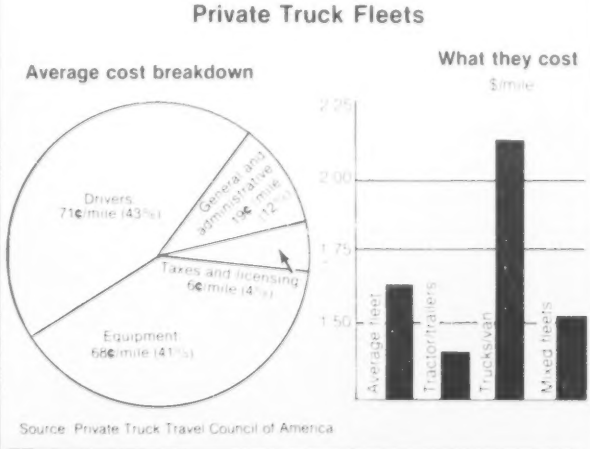
Truck fleet costs

Running your own private truck fleet can be costly. A new nationwide survey suggests that the typical corporate operation now costs $1.63/mile.

The study of 577 fleets (compiled for the Private Truck Council of America) shows wide differentials. Fleets comprised principally of tractor/trailers cost $1.38/mile. Companies using mostly straight trucks and vans spend $2.13/mile. And those with mixed fleets fall in the middle ($1.52/mile).

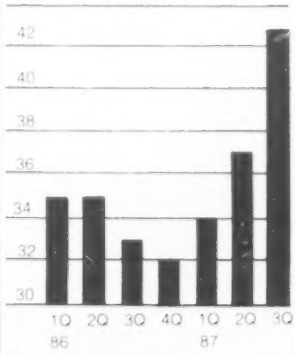
Other key findings of the survey:

- **Cost breakdown:** Mixed fleets spend slightly more for equipment than for drivers—63¢/mile vs. 62¢/mile. But, overall, drivers' wages account for the biggest portion of cost—71¢/mile vs. 68¢/mile for equipment.
- **Unionization impact:** Union drivers for company-owned trucks make an average of 15¢/mile more than non-union drivers. With leased fleets, the difference is 25¢/mile.
- **Leasing vs. ownership:** Fleet leasing reduces overall tractor/trailer outlays substantially. For union fleets the figures are $1.49/mile (company-owned) vs. $1.42/mile (leased). For non-union fleets the comparable figures are $1.35/mile (company owned) and $1.13/mile (leased).
- **Age of equipment:** On average, tractors are five years old and straight trucks are seven years old.
- **Intracorporate hauling:** Some 24% of responding fleets allow private carriers to haul freight for compensation for other members of their corporate family. Among tractor/trailer operations, 56% participate in intracorporate hauling.
- **For-hire activities:** Some 19% of all surveyed private fleets and 37% of the tractor-trailer operators have ICC authority for supplemental for-hire operations.



Source: Private Truck Travel Council of America

over the second half (vs. nearly 36 million in the first half). Supplies, in the meantime, should begin to improve on more normal USX output and the elimination of production problems at other mills. Given this scenario, price hikes should be harder to come by. Indicative of the changing climate: reluctance on the part of some mills to go along with an announced $20/ton boost on carbon and alloy plate. Other previously announced hikes seem to be going through—namely on bar and stainless plate.



Polypropylene

Prices are moving up about 4¢/lb—with some 43-45¢/lb now asked for the bellwether homopolymer grade. Behind the increase: A combination of rising propylene costs plus strong domestic and export markets. Tight supplies are still another factor behind the climb which has seen tags rise 10¢/lb over the past 9 months. As of latest report, for example, producers were operating at virtually full capacity. But some relief is in sight. Next year's potential should be up by a hefty 12%—and by 1990 some 1.7 billion pounds or 26% will have been added to industry nameplate.

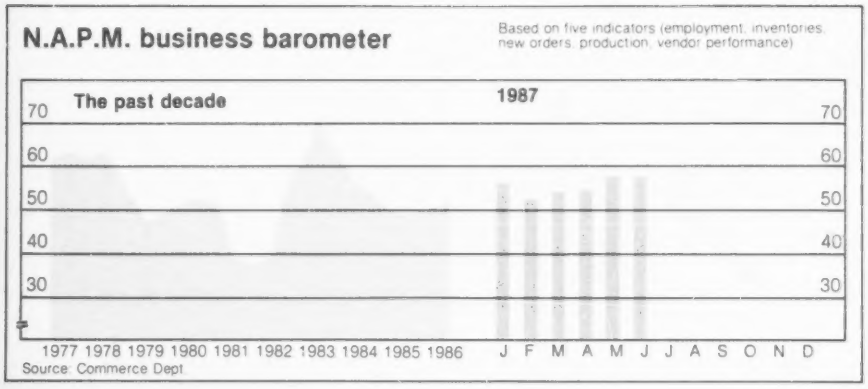
Paper

Producers are scheduling as much as $40/ton increase in uncoated free sheet. But boosts will probably affect only reprographic and possibly offset paper—with less upward pressure on sheet-fed forms and free-sheet forms. Major suppliers have also announced a $60/ton advance for coated groundwood—bringing asking prices on the No. 5, 40-lb grade to $740/ton. Little change, however, is expected on coated free sheet grades. Linerboard, in the meantime, remains at a solid $350/ton, and corrugated shipping container prices still continue to edge up.

Computers

Price slippage persists despite relatively high demand. Latest moves include 1) a $300 reduction in IBM's portable Model 2 PC (to $1,395) which is being replaced by a newer Model 3 version and 2) Sun Microsystems' introduction of a line of high-performance workstations that offer performance comparable to a minicomputer for one tenth the cost. This follows an earlier (April) 37% reduction of its low-end workstation to under $5,000—a move that was subsequently followed by its main competitors, Apollo Computer and DEC.

BUSINESS DATATRAK


N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1987
70
60
50
40
30
1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
J F M A M J J A S O N D
Source: Commerce Dept

KEY ECONOMIC TRENDS

Capital spending's a capital idea

The near-term business outlook doesn't look bad. Late summer and fall will see a continuation of the first half's slow growth pattern.

The latest N.A.P.M. Business Barometer reading suggests continued advances—it has been averaging 5% above the neutral 50 mark (see chart).

If this pattern continues, says N.A.P.M. Business Survey Committee chairman Robert J. Bretz, it would support a 3.4% real growth rate for 1987 as a whole.

The most bullish segment of the N.A.P.M. indicator is new orders, where 35% of the responding purchasing executives report "better" incoming business. Only 15% note some decline over the past month.

Other evidence pointing to a tolerably good second half is a new Conference Board survey that finds capital appropriations—a lead indicator of plant and equipment spending—moving up the for third consecutive quarter (see chart).

As Walter Arvin, the economist who directed the study, puts it, "The economy should see a gradual increase in capital spending during each quarter of this year, with a possible spurt in the final quarter. Spending will also be aided as corporate tax rates fall."

Capital spending will also look better. Since 1982, U.S. capital stock has been increasing at less than 1% annual rate.

Even consumer buying intentions have leveled off after recent declines (see chart). The 4.2% who plan to buy a new auto over the next six months is far under the 5%+ figures of 1986. But this is offset by expectations for heftier appliance and carpet purchases.

Consumer confidence—bolstered by rising wages and relatively low inflation—remains high. The number of people expecting more jobs has also been rising.

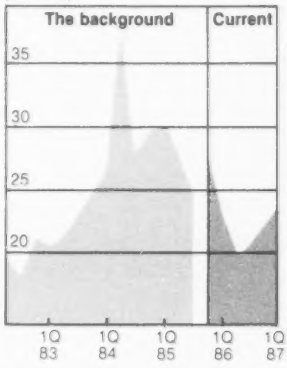
The latter projection is supported by an increase in factory overtime. The figure (3.8 hours) is at its highest level in years, suggesting that manufacturers will soon have to add to their work forces.

A gradual shift in trade away from imports and toward exports is also a positive sign. This is especially true for capital goods firms because their major foreign competitors are in Japan and Europe—where currencies have appreciated sharply against the dollar over the past two years. One machinery maker observes, "The weaker dollar is starting to work. American machines are now easier to buy all over the world."

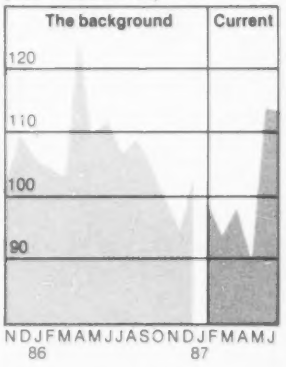
That's not to say that big overall economic gains lie ahead. With Detroit expected to turn out only 7-7.5 million domestic

Leading indicators

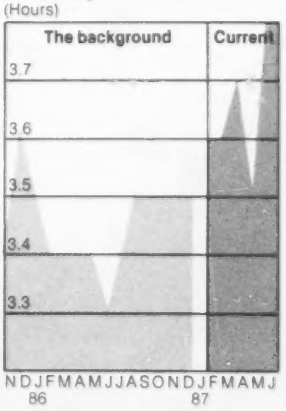
1. Capital appropriations
(Bil. of $)



2. Consumer buying plans
(Index: 1985 = 100)



3. Factory overtime
(Hours)



cars this year (vs. 8.2 million in 1986), that would be asking for too much.

But the preponderance of evidence is bullish. A recent survey of top economists calls for GNP to grow at a 3% annual rate through yearend and into early 1988.

Execs expect booming business

Although the economy has been improving for the past four and a half years, it still has a way to go, according to 1,000 top executives surveyed by the Conference Board. The survey shows the second consecutive quarterly advance in its overall "confidence index"—a barometer based on current and future trends in the economy and in individual industries.

A survey spokesman adds that strongest responses came from executives in the rubber, publishing, and primary metals industries where confidence levels reached record highs. Renewed strength in these industries underscores rising commodity prices, the declining dollar, and increasing export volume.

The latest Dun & Bradstreet quarterly survey of more than 1,400 business leaders is even more encouraging. The firm's "composite optimism" index is now at its highest level since the spring of 1985.

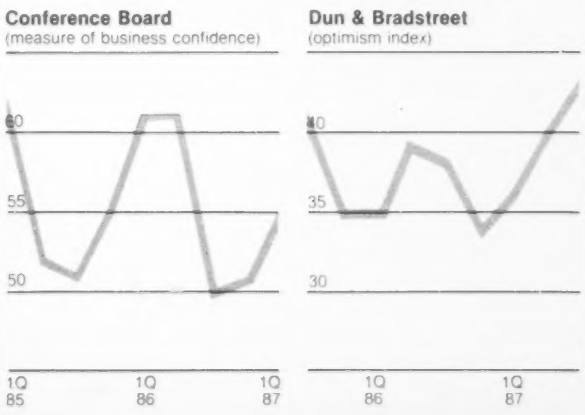
As Joseph W. Duncan, D & B's corporate economist puts it, "The improving trade picture is the most important factor behind the increased optimism, particularly among manufacturers. Orders for U.S. exports are rising."

Equally encouraging is the fact that these corporate pace setters do not anticipate any major jump in prices. The 37% who see 3Q increases compared to a year earlier is only 1% more than the 36% reading of the previous 3-month period.

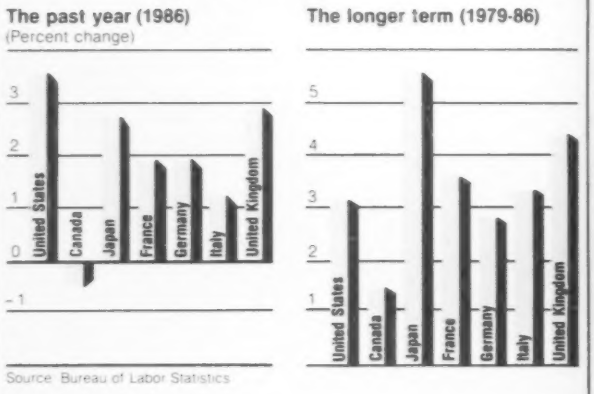
Duncan also adds that "the percentage of executives forecasting price hikes remains far below the levels reported in the first three years of this decade. Moreover, the price increases that are made will be small."

Also of interest to PMs: projections of continuing close-to-the vest inventory policies. The overall percentage of firms planning 3Q increases remains at the previous quarter's level. Among manufacturers and wholesalers, the number expecting increases actually dropped by 1%.

Businessmen turn more optimistic



Global productivity trends



Source: Bureau of Labor Statistics

U.S. leads in efficiency gains

We're not doing that badly on the factory productivity front compared to what's been happening in the rest of the industrialized Free World.

A new Bureau of Labor Statistics analysis finds that the 3.5% U.S. efficiency increase posted over the past year surpassed that of both Japan and Western Europe. This reading looks quite impressive when stacked up against the 1.7% trade-weighted average gain of the nine key foreign competitors. It is the first time since BLS began tabulating this material in 1950 that the U.S. has recorded the largest percentage increase of any country.

One year does not guarantee that we're heading for the top, but it does follow an even better 1985 when U.S. productivity rose 4.4%. Things also look good for the longer run. Over the 7-year period ending in 1986, U.S. manufacturing efficiency rose at an average annual rate of 3.1%—not that much under comparable figures for Japan (5.6%), France (3.6%), and the U.K. (4.4%).

The new figures suggest that U.S. modernization is finally beginning to pay off. A more efficient labor force may also be contributing to the recent performance improvement.

Another encouraging sign: U.S. factory wage boosts last year were lower than any other industrialized nation. At 2.9%, they were also under the U.S. efficiency gain. So unit labor costs actually fell 0.6%.

This is in sharp contrast to other countries where unit labor cost increases (calibrated in their own domestic currencies) rose from 0.7% (Japan) to 5% (U.K.).

Because of the dollar devaluation, those unit labor costs really skyrocketed in dollar terms last year—Japan (42.6%), France (33.1%), West Germany (39.8%), Italy (31.9%), and the U.K. (18.8%).

Average out all the above figures and it means that U.S. manufacturing labor costs plummeted 21.8% last year *vis-a-vis* those of our major competitors.

CURRENT PRICES

Oil's influence spreading

The modest increases in industrial producer prices has spilled into early summer—another .5% has been tacked onto overall averages over the past 30 days.

As in other recent months, the prime mover has been energy (notably oil). But now the impact is spreading into such key oil derivatives as chemicals and synthetic materials. Metals have also continued to move up. Capital goods tags, however, have remained relatively steady overall.

Here's a more detailed rundown:

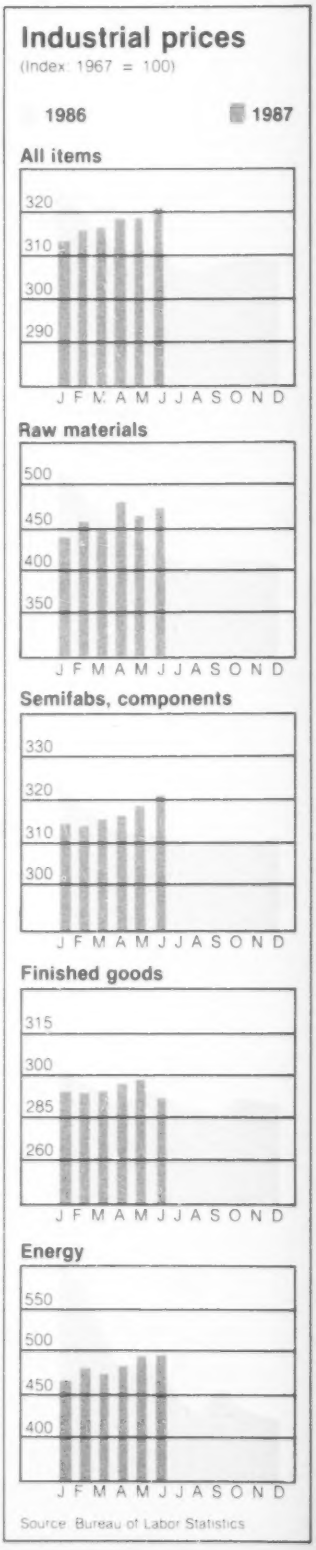
- **Energy:** Another 1.7% was added to the average bill over the past month. Significant boosts were recorded in crude petroleum, gasoline, home heating oil, electric power, diesel fuel, and jet fuel. About the only products heading lower were liquified petroleum gas and natural gas.
- **Chemicals:** Organic formulations—those most affected by petroleum—zoomed up an eye-opening 3.7% over the month. But inorganic chemicals showed only a 0.2% advance and were still about 1% under year-earlier levels.
- **Synthetic materials:** The same energy impact pushed plastic resin averages up 2.4% in the past 30 days. There were also some subdued advances in synthetic rubber and fibers.
- **Metals:** Continued advances were reported in copper, aluminum, lead, and zinc. Nonferrous and steel scrap also rose. But most feel that lackluster demand will bring some leveling off soon.
- **Capital equipment:** Averages remain relatively unchanged as increases in aircraft, heavy trucks, switchgear, and material handling equipment offset declines in light trucks,

This month's breakdown

	Latest level (June)	% change Month ago	% change from: Year ago
Bearings	355.6	0.1	−0.3
Bolts, nuts, etc.	278.6	0.2	0.6
Chemicals, inorganic	291.4	0.2	−1.0
Chemicals, organic	365.9	3.7	13.1
Concrete products	325.6	0.1	0.0
Corrugated cartons	295.9	0.6	12.3
Cutting tools, small	293.0	0.0	0.6
Electric lamps (bulbs)	347.5	0.1	0.1
Electronic components	201.8	−0.2	0.5
Fans and blowers	370.0	−0.2	1.2
Foundry and forge products	363.8	−0.1	−0.1
Fuel oil (residual)	650.8	1.7	43.7
Furniture, commercial	326.8	0.1	2.9
Gasoline	404.4	3.1	3.0
Glass, flat	237.1	0.7	3.2
Glass containers	400.8	0.9	0.1
Gypsum products	328.3	−1.8	−7.3
Hand tools	395.0	0.2	3.2
Hand tools, power driven	241.6	−0.2	1.4
Industrial furnaces	402.3	0.0	2.0
Integrating and measuring instruments	239.7	−0.4	1.9
Internal combustion engines	358.9	0.0	1.6
Lubricating oil	N/A	N/A	N/A
Lumber millwork	329.7	0.5	3.2
Material handling equipment	298.9	0.3	0.9
Metal containers	360.3	0.1	−0.3
Metal mill shapes (nonferrous)	310.7	0.6	3.3
Metal tanks	299.6	0.2	−0.1
Motors and generators	355.5	0.1	1.9
Motor trucks	318.7	−0.9	2.4
Office and store equipment	158.8	0.1	2.8
Paperboard	295.1	−0.4	9.9
Paper boxes and shipping containers	286.5	0.4	7.4
Paper office supplies	242.4	−0.3	2.5
Paint	284.1	0.2	1.1
Plastic resins	311.7	2.4	5.6
Precision measuring tools	274.9	0.9	2.6
Pumps and compressors	365.8	0.1	1.2
Refractories	372.6	0.6	0.1
Rubber belts and belting	335.3	0.8	−0.6
Scales and balances	234.0	0.0	1.2
Steel products	352.8	0.1	1.5
Switchgear	292.9	0.5	2.7
Textiles, synthetic fibers	147.5	0.3	−1.2
Textiles, gray fabrics	154.9	0.8	2.4
Tires and tubes	231.0	0.0	−1.6
Transformers and power regulators	234.1	−1.2	0.5
Welding equipment	303.9	0.0	0.9
Wire and cable	207.2	0.4	0.4

Industrial prices

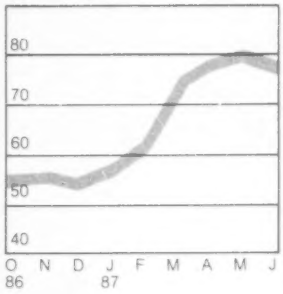
(Index: 1967 = 100)



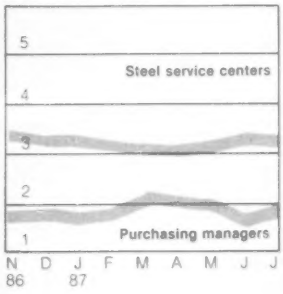
Source: Bureau of Labor Statistics

Steel

Operating rates

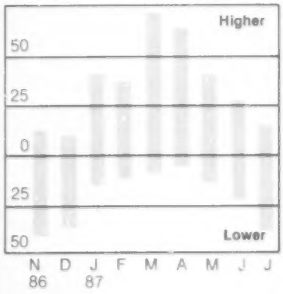


Inventories
(Months supply on hand)

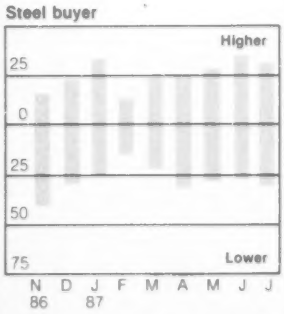


Demand
(Percent of respondents)

Service centers incoming orders



Steel buyer



power transformers, and integrating and measuring instruments.

Other trends worth noting: 1) Some new boosts in packaging—notably corrugated and glass containers, 2) declines in paper office supplies, and 3) leveling off in construction materials due to a less rosy outlook on housing starts.

Where do we go from here? Government price watchers see continued advances in the fall. But they add that because energy is already factored in, future increases will be somewhat more modest than those posted during the first half of this year.

STEEL SCENE

Buyers are getting less demanding

Steel demand—after running ahead of projections during the first half of the year—may be ready to take a breather.

At least that's what distributors responding to the latest Steel Service Center Institute (SSCI) survey are saying. The last report shows that 39% anticipate a decrease in incoming orders over the next three months—more than double the 16% who are still betting on further increases.

This marks a continuation of recent deceleration. Two months ago, expected increases outweighed expected decreases (42% vs. 13%). And last month it was basically even—25% anticipated increases and decreases in new orders.

SSCI president, Andrew G. Sharkey, says the falloff reflects the slowdown that traditionally hits association members every third quarter. But he does add that those anticipating near-term gains are still above the levels noted last summer.

One possible factor contributing to the more cautious service center outlook could be General Motors' "big mill" approach to steel procurement for 1988 cars. It suggests that some distributor business will be shifted over to integrated steel producers.

Overall user purchases of the metal may also be ready to level off. It looks like a standoff for the next few months as the 31% of queried buyers thinking of increasing purchases is offset by another 31% who think they'll be buying less metal over the next three months.

While purchases may be a bit less robust through early fall, there's little sign of substantial downward pressure on prices. The GM negotiations alluded to above did result in some concessions. GM reportedly acquired steel for 1988 model vehicles 2-3% under what it has been paying for 1987 models. But that's about it as far as price weakness is concerned.

The latest SSCI survey finds most distributors now reconciled to having to pay more for their metal over the next six months. In the latest monthly survey, four out of every five see price increases, and 11% put the advance at over 5%.

Nor do imports offer opportunities for lowering procurement costs. Only 17% of these same distributors see tags on incoming shipments of carbon steel products running under comparable domestic levels. A year ago, the figure was 45%.

And the same trend is noted for stainless steel where the 35% noting bargains compares to 83% a year earlier. Equally important, only 6% now say the savings are in excess of 10%.

Steel buyers agree. Only 17% say foreign prices are lower than comparable domestic levels vs. 40% in April. Again, the differentials are dubbed "slight."

Buyers aren't too happy about availability, either. Several product lines are now listed as being candidates for tightness over the next six months. Leading the pack is coated sheet. But plate, hot-rolled sheet, and cold-rolled sheet are also mentioned by a significant number of queried buyers.

Fear of shortages, however, has apparently not

Import prices
(Compared to domestic)

Steel buyers

ABOVE 31%
SAME 52%
SLIGHTLY BELOW 17%
SUBSTANTIALLY BELOW 0%

Service centers (carbon)

ABOVE 4%
SAME 79%
5-10% BELOW 13%
10-20% BELOW 4%
OVER 20% BELOW 0%

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

caused any increase in user inventories. Quite the contrary. The typical buyer currently has only a 1.8 month's supply on hand vs. 2.04 a year earlier. And judging from responses to another question, they may pare stocks even more over the next few months.

Steel service centers—notwithstanding an increase in inventory over the past month—also imply that they'd like to see slimmer inventory levels. Some 15% rate current holdings as "too high" vs. only 9% who see them as being "too low."

PROCUREMENT STATUS

Inventories sprout up

The trend toward tightness is continuing. The evidence comes from *PurchasingWorld*'s exclusive leadtime index (at 51, just above the neutral 50 mark for the fourth month in a row) and the N.A.P.M. speed-of-delivery yardstick which shows delays outrunning faster performances (15% vs. 5%).

The N.A.P.M. report also notes items in short supply, including galvanized, coated, and cold-rolled sheets and stainless pipe and tubing. Also hard to get are polystyrene, plastic resins, caustic soda, and a few electronic components.

This may be why buyers report some slight inventory accumulation (19% higher vs. 17% lower). This is the first time in three years that accumulators have dominated.

But this small advance is being partially offset by somewhat higher manufacturing activity. The increase in terms of days' supply is minimal.

Clearly then, no one is really worried or laying in a big extra supply—a feeling that PMs would seem to confirm. Several say that items like steel may actually ease due to a combination of reduced ordering and an increase in the industry operating rate.

As for plastics, new capacity is scheduled to come on stream over the next year. A similar redressing of imbalances is seen in electronic components as Japanese producers raise production rates slightly.

Perhaps forward buying is the best indication that things are under control. In the production material sphere, only 19% of PMs surveyed are now committing 90 days or more in advance vs. 25% the previous month.

As one buyer puts it, "There's nothing to suggest a significant change in the procurement climate—not with operating rates still near 80%."

Signs of a pickup in capital spending could lead to more capacity. The N.A.P.M. notes that "for the first time in many months, a number of members now plan to expand their capital expenditures."

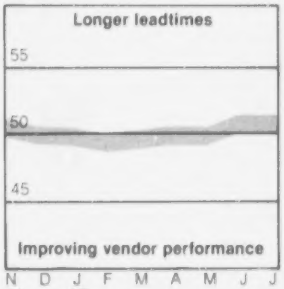
If true, leadtimes should flatten out by fall or winter—assuring continuation of one of the longest buyers' markets in post-war history.

This is also backed up by latest capital spending surveys. New tabulations suggest that investment spending will rise 3-3.5% this year.

Monthly procurement status report

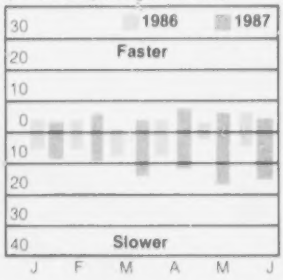
Leadtime index

A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



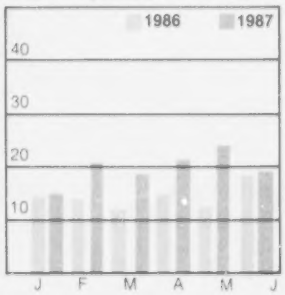
Delivery performance

(Percent reporting deliveries)



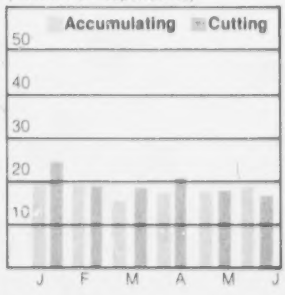
Forward commitments

(% committing 90 days or more in advance)



Inventory strategy

(Percent of respondents)



Source: NAPM

Leadtimes and availability

Chicago: Steel leads are out 2-4 weeks; heavy and light plate (12-15), and structurals (4-6). Cold-rolled sheets are unchanged at 10-12. Aluminum coil and sheet take 18-20 weeks; plate is 12-16.

Cleveland: Corrugated is out to 3-4 weeks. Elsewhere, it's status quo: folding boxes and polyethylene (2-3); steel canisters and maintenance paint (2); skids, softwood plywood and lumber (1-3); metal alloying materials (on demand); and cold-finish aluminum (8).

Los Angeles: Weekly waits: Galvanized and heavy-duty steels (12-14), grey iron castings (6-8), brass castings (8-10), domestic fasteners (7-9), lube oils (2), wire round resistors (8-12), linear ICs (30), polyethylene bags (4); aluminum sheet and pipe (12).

Houston: Extensions in plastic resins brought HDPE and polypropylene to 40 days. Some cylinders and valves are slow, too. Galvanized

steel coils are in to 90 days. Heavy equipment items are steady: 4-6 months for pumps; 3-6 months for low-voltage motors.

Philadelphia: Stainless round coil from mills are out 2 weeks (to 14), but corrugated boxes are in to 2 weeks and xerographic paper in to 2 days. Other weekly waits: standard drills (2-4), taps (3-4), grinding wheels (4-6), and cutting oils and lubes (4-6).

Pittsburgh: A few extensions in nonferrous. Silicon is out to 3 weeks and zinc is out to 4 because of a long Canadian strike. Other unchanged (weekly) leads: corrugated (3-4), plastic packaging (2-3), and plastic resins (5-6).

Leadtimes (in weeks)

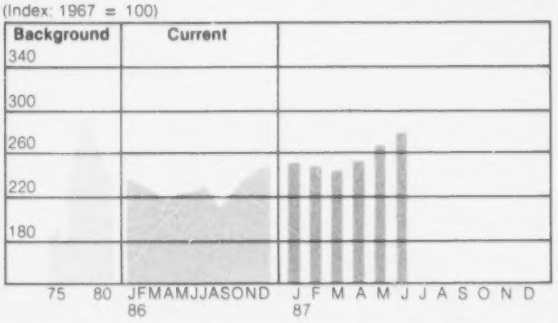
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	4
C-R Sheet (Chgo)	11	11	10
Plate (Phil)	10	10	3½
Plate (Chgo)	13½	13½	4½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	5½	5½	5½
H-R Bars (Chgo)	11	11	4½
Cold-Drawn Bars (Phil)	5½	5½	5½
Galvanized (LA)	13	13	13
Galvanized (Chgo)	12	12	10
Structurals (Chgo)	5	5	4½
Structurals (Hous)	11	11	17
Tubing (Phil)	5½	5½	5½
Grey Iron Castings (LA)	7	7	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	17	17	17
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	16	16	16
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	4½	4½	9
Motors (Phil)	9	9	9
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	9	9	9
Relays (Chgo)	15	15	15
Resistors (Chgo)	9	9	9
Resistors, Wirebound (Phil)	5	5	5
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	2½	2½	1½
Plywood (Chgo)	3	3	3
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2	2	2
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	2½	2½	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	2
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3½	2½	2½
Cartons, Corrugated (Hous)	2	2	2
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	1
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	1
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	½	½	½
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NONFERROUS			
Aluminum Coil (Chgo)	19	19	13
Aluminum Plate (Chgo)	14	14	12
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	19	19	13
Brass Castings (LA)	9	9	9
Brass Rods (Chgo)	7½	7½	9
Brass Sheet (Chgo)	11	11	5
Brass Tube (Chgo)	13	13	7
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	4	4	6
Copper Tube (LA)	7	7	7
Copper Tube (Phil)	5½	5½	5½
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	2	2	2
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	4	3	3
MISCELLANEOUS			
Bearings, Domestic (Phil)	2	2	2
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	8	8	9
Fasteners, Std. (Phil)	3	3	3
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	21
Heat Exchangers, Hi-pressure (Hous)	24	24	26
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	1½
Pumps (Hous)	21	21	24
Pumps (LA)	11	11	11
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	4	4	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month 276.3
Month before 272.6
Year ago 225.0

(Index: 1967 = 100)



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	16.50	16.50	23.95
Steel, bars, Pitts., cwt.	16.50	16.50	23.95
Steel, bars, C.R., Pitts., cwt.	19.45	19.45	31.00
Steel, plates, Pitts., cwt.	19.75	18.25	18.25
Steel, plates, H.R., Pitts., cwt.	19.75	18.25	18.25
Steel, sheets, C.R., Detroit, cwt.	26.90	26.90	25.90
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	.725	.700	.550
Antimony, N.Y., dealer, lb.	1.15	1.18	1.13
Beryllium-copper, cost ingot, lb.	5.65	5.65	5.35
Brass, red, 85%, [sheet], lb.	1.41	1.37	1.28
Brass, yellow, [sheet], lb.	1.36	1.32	1.23
Cadmium, N.Y., dealer, lb.	1.50	1.60	1.04
Copper, electrolytic, wire bars, refd., lb.	.77	.73	.64
Copper sheet, over 24 in., lb.	1.50	1.46	1.37
Lead, common, N.Y., lb.	.400	.350	.220
Magnesium, pig ingot, [99.8%], lb.	1.53	1.53	1.53
Mercury, 20 fl. lots, N.Y., fl.	295.00	310.00	239.00
Molybdenum, oxide, dealer, lb.	2.58	2.58	3.00
Nickel, cathode, dealer, lb.	2.18	2.17	1.86
Platinum, dealer, oz.	559.00	582.00	437.00
Silver, N.Y., oz.	7.65	7.82	5.08
Tin, N.Y., dealer, lb.	3.09	3.20	2.58
Zinc, Prime West, East St. Louis, lb.	.460	.450	.415
Zinc, die casting alloy, No. 3, lb.	.525	.495	.475
PAPER			
Uncoated book #3 offset, ton	860.00	860.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.96	16.68	16.33
Shipping sacks, ton	390.00	390.00	390.00
Solid bleached paperboard, ton	620.00	620.00	550.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	350.00	310.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.243	.240	.247
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.22	1.22	0.94
Cotton middling, 1", N.Y., lb.	.719	.682	.655
Printcloth, 48", 80x80, N.Y., spot, yd.	0.97	0.98	0.72
Army duck, 37", 13 oz., yd.	1.495	1.445	1.480
Blended printcloth, 64", 78x54, yd.	.910	.940	.765
20s combed yarns	1.97	1.88	1.70
Wool 64s, Staple, lb.	2.70	2.70	1.90
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	105.00	105.00	80.00
Benzene, petroleum, tanks, Houston, gal.	1.35	2.50	0.75
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.91	.91	.91
Methanol, snv., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.30	.28	.28
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.295	.270	.270
Polyethylene resin, low density liner film grade (market place), lb.	.315	.315	.265
Polypropylene, homopolymer grade (market price), lb.	.400	.390	.340
Polystyrene, general purpose grade (market price), lb.	.530	.480	.310
Polyvinyl chloride, pipe grade (market price), lb.	.340	.325	.295
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.425	.520	.210
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	134.50	134.50	157.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.77	.77	.73
Xylene tanks, gal.	.900	.850	.800
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	329.30	325.60	322.30
Lumber 2x2 pine, mbf, cl	324.65	319.65	315.85
Plywood, plyform, ¾", msf, cl	580.75	577.85	595.95
Plywood, ⅜", msf, cl	384.15	381.60	387.55
Cement, bulk, ton, tl	64.35	63.50	65.56
Sand, ton, cl	7.21	7.14	6.62
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	49.08	49.00	47.89
Crushed stone, 1½", ton, cl	8.33	8.29	7.83
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.90	0.90	0.83
Gypsum sheathing, ½"x1"x8", msf, tl	238.77	227.00	217.57
Brick, common, per thousand, tl	198.26	192.82	184.96
Asphalt paving, AC-20	132.72	127.31	150.81
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.48	7.15	7.09
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	17.25	17.00	8.50
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	20.25	19.50	13.20
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	.505	.545	.430
Gasoline, 94 oct., reg., Chi., tank car, gal.	.585	.553	.404
Heating oil, No. 2, Chi., bulk, gal.	.540	.530	.355
Heating oil, No. 2, N.Y., bulk, gal.	.553	.510	.348
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	.533	.510	.340
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.245	.245	.260
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	83.00	83.00	72.00
Steel, No. 1 hvy., dlvd., Chi., ton	78.00	76.00	70.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.705	.650	.540
Copper, No. 2, East, wholesale buy, dlvd., lb.	.620	.565	.460
Brass, red, East, wholesale buy, dlvd., lb.	.665	.610	.500
Brass, yellow, East, wholesale buy, dlvd., lb.	.345	.345	.300
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.455	.435	.310
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.510	.475	.330
Zinc, old, East, wholesale buy, dlvd., lb.	.200	.200	.170
Lead, clean solids, East, wholesale buy, dlvd., lb.	.275	.230	.130
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	45.00	Nom.
Paper, old corrug. box, dlr., Chi., ton	45.00	45.00	15.00
Paper, old corrug. box, dlr., N.Y., ton	25.00	25.00	15.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	.12	.12	.09
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	.23	.23	.11

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Circle 367 on card

Lean inventories mean good business

Industrial purchasing executives have earned top marks for their efforts to keep inventories trim. Not only are their purchased material stocks low by historical standards, but they've also been heading lower in the past few months.

There's no indication of any change in this overall trend. Total volume of stocks on the shelves could increase fractionally as factory activity continues to edge up. But in terms of days' supply, buyers seem determined to keep holdings at current levels or maybe even bring them down a bit lower.

Odds are that they can do it, too. A new nationwide *PurchasingWorld* survey suggests a continuing trend toward just-in-time delivery systems and increased use of computerization.

But there are other factors at work to limit inventories. There is little concern about availability as capacity in almost all lines is ample. And while some respondents feel there could be a few areas where leads may stretch out, there should be only a few bottlenecks that would prompt laying in extra as insurance.

The still-high cost of carrying inventories is also encouraging the hold-the-line approach. Most buyers put these charges in the 1.5-2%/month range. For some, these costs have actually begun to creep up in line with slightly higher interest rates.

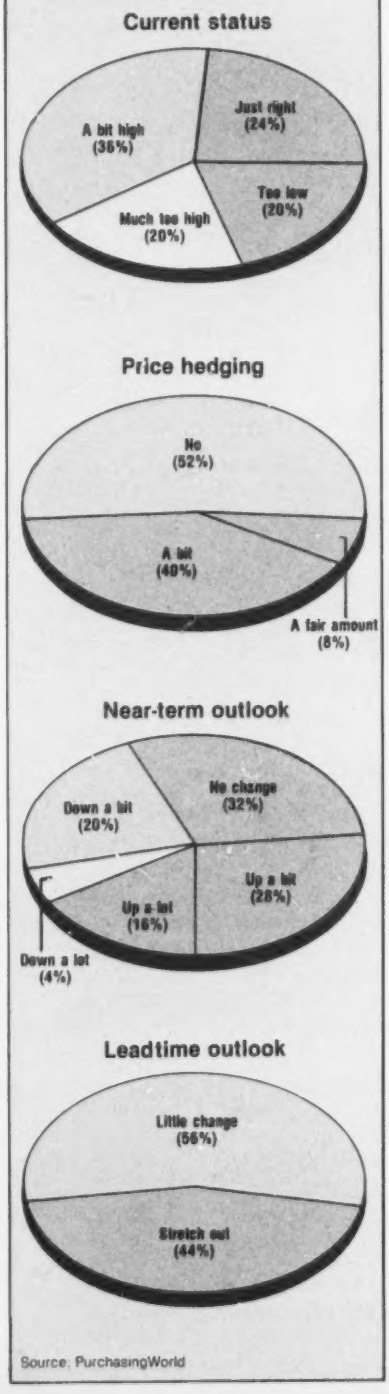
One Midwestern purchasing manager sees new stocking techniques, problem-free procurement climate, and the need to cut costs as signals that there will be continued inventory restraint. Other *PurchasingWorld* survey respondents see these trends shaping up:

- **Past six months:** Modest shrinkage is suggested by the fact that 40% report days' supply declines since the beginning of the year—well under the 28% noting increases. The remaining 32% say this key ratio has remained unchanged.
- **Current evaluation:** While 20% and 24% rate today's levels as too low and just right, respectively—56% feel that holdings are too high. That's still a big improvement over last September when a similar *PurchasingWorld* survey found 90% of the respondents in the "too high" category.
- **Areas of excessive stocks:** Scattered items are still being mentioned but conspicuous by their absence are steel, nonferrous metals, and electronic components—all sectors that caused considerable concern one year ago.
- **Near-term plans:** Tonnages could be rising to keep up with improving demand. About 44% see increases compared to 24% who predict declines. The remaining 32% believe things will remain the same.
- **Hedging activity:** Some purchases to beat price boosts are reported by nearly half the survey respondents, although the majority add that such hedges are quite modest. Areas involved include plastics, steel, ferroalloys, petrochemicals, titanium dioxide, lumber, and maintenance items. On the other hand, there is absolutely no hedging to protect against possible work stoppages.
- **Lead-time trends:** About 52% of queried buyers have experienced stretchouts over the past six months. More important, 44% feel further lengthening is possible. Products likely to be affected include plastics, aluminum, steel, plastic resins, electronic components, and tooling.

Buyers are also stepping up their attempts to achieve just-in-time (JIT) deliveries. 245 survey respondents say they have already implemented such a system. Another 48% say they are working on one. Of course there are a few holdouts. One PM feels that JIT is not nearly as cost-effective as it is claimed to be. He says there's no such thing as a free lunch and that suppliers are just building the inventory cost into their prices.

On the other hand, most buyers are attempting to pare stocks by moving toward blanket ordering, more computerization, MRP II, long-term contracts, consignment agreements, better vendor liaisons, and more accurate sales forecasts. As one PM sums it up, "We've cut our days' supply by about 20% over the past two years and hope to knock another 5-10% off overall levels by 1988." **PW**

Inventory trends: Four views



Source: PurchasingWorld